RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/643,038
Source: IFW0
Date Processed by STIC: 03/08/2005

ENTERED

IFWO

RAW SEQUENCE LISTING DATE: 03/08/2005
PATENT APPLICATION: US/10/643,038 TIME: 07:28:19

Input Set : N:\DA\US10643038.raw
Output Set: N:\CRF4\03032005\J643038.raw

```
     1 <110> APPLICANT: C. Frank Bennett
     2       Jacqueline Wyatt
     3 <120> TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOLIPASE A2, GROUP IIA
(SYNOVIAL) EXPRESSION
     4 <130> FILE REFERENCE: RTS-0221
     5 <140> CURRENT APPLICATION NUMBER: US/10/643,038
     6 <141> CURRENT FILING DATE: 2003-08-18
     7 <150> PRIOR APPLICATION NUMBER: US/09/865,866
     8 <151> PRIOR FILING DATE: 2001-05-25
     9 <160> NUMBER OF SEQ ID NOS: 173
    11 <210> SEQ ID NO: 1
    12 <211> LENGTH: 20
    13 <212> TYPE: DNA
    14 <213> ORGANISM: Artificial Sequence
    15 <220> FEATURE:
    16 <223> OTHER INFORMATION: Antisense Oligonucleotide
    17 <400> SEQUENCE: 1
    18       tccgtcatcg ctcctcaggg                                              20
    20 <210> SEQ ID NO: 2
    21 <211> LENGTH: 20
    22 <212> TYPE: DNA
    23 <213> ORGANISM: Artificial Sequence
    24 <220> FEATURE:
    25 <223> OTHER INFORMATION: Antisense Oligonucleotide
    26 <400> SEQUENCE: 2
    27       atgcattctg cccccaagga                                              20
    29 <210> SEQ ID NO: 3
    30 <211> LENGTH: 854
    31 <212> TYPE: DNA
    32 <213> ORGANISM: Homo sapiens
    33 <220> FEATURE:
    34 <221> NAME/KEY: CDS
    35 <222> LOCATION: (136)...(570)
    36 <400> SEQUENCE: 3
    37       gaattcccaa ctctggagtc ctctgagaga gccaccaagg aggagcaggg gagcgacggc    60
    38       cggggcagaa gttgagacca cccagcagag gagctaggcc agtccatctg catttgtcac   120
    39       ccaagaactc ttacc atg aag acc ctc cta ctg ttg gca gtg atc atg atc    171
    40                         Met Lys Thr Leu Leu Leu Leu Ala Val Ile Met Ile
    41                           1               5                  10
    42       ttt ggc cta ctg cag gcc cat ggg aat ttg gtg aat ttc cac aga atg     219
    43       Phe Gly Leu Leu Gln Ala His Gly Asn Leu Val Asn Phe His Arg Met
    44                15                  20                  25
    45       atc aag ttg acg aca gga aag gaa gcc gca ctc agt tat ggc ttc tac     267
    46       Ile Lys Leu Thr Thr Gly Lys Glu Ala Ala Leu Ser Tyr Gly Phe Tyr
```

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```
     30                  35                  40
ggc tgc cac tgt ggc gtg ggt ggc aga gga tcc ccc aag gat gca acg     315
Gly Cys His Cys Gly Val Gly Gly Arg Gly Ser Pro Lys Asp Ala Thr
 45                  50                  55                  60
gat cgc tgc tgt gtc act cat gac tgt tgc tac aaa cgt ctg gag aaa     363
Asp Arg Cys Cys Val Thr His Asp Cys Cys Tyr Lys Arg Leu Glu Lys
                    65                  70                  75
cgt gga tgt ggc acc aaa ttt ctg agc tac aag ttt agc aac tcg ggg     411
Arg Gly Cys Gly Thr Lys Phe Leu Ser Tyr Lys Phe Ser Asn Ser Gly
                80                  85                  90
agc aga atc acc tgt gca aaa cag gac tcc tgc aga agt caa ctg tgt     459
Ser Arg Ile Thr Cys Ala Lys Gln Asp Ser Cys Arg Ser Gln Leu Cys
            95                  100                 105
gag tgt gat aag gct gct gcc acc tgt ttt gct aga aac aag acg acc     507
Glu Cys Asp Lys Ala Ala Ala Thr Cys Phe Ala Arg Asn Lys Thr Thr
        110                 115                 120
tac aat aaa aag tac cag tac tat tcc aat aaa cac tgc aga ggg agc     555
Tyr Asn Lys Lys Tyr Gln Tyr Tyr Ser Asn Lys His Cys Arg Gly Ser
125                 130                 135                 140
acc cct cgt tgc tga gtcccctctt ccctggaaac cttccaccca gtgctgaatt     610
Thr Pro Arg Cys
                145
tccctctctc ataccctccc tccctaccct aaccaagttc cttggccatg cagaaagcat   670
ccctcaccca tcctagaggc caggcaggag cccttctata cccacccaga atgagacatc   730
cagcagattt ccagccttct actgctctcc tccacctcaa ctccgtgctt aaccaaagaa   790
gctgtactcc ggggggtctc ttctgaataa agcaattagc aaatcaaaaa aaaaaaagga   850
attc                                                                854
```

<210> SEQ ID NO: 4
<211> LENGTH: 20
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: PCR Primer
<400> SEQUENCE: 4
cccatgggaa tttggtgaat 20

<210> SEQ ID NO: 5
<211> LENGTH: 21
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: PCR Primer
<400> SEQUENCE: 5
cataactgag tgcggcttcc t 21

<210> SEQ ID NO: 6
<211> LENGTH: 29
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: PCR Probe

RAW SEQUENCE LISTING DATE: 03/08/2005
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Input Set : N:\DA\US10643038.raw
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99 <400> SEQUENCE: 6
100       tcctgtcgtc aacttgatca ttctgtgga                                  29
102 <210> SEQ ID NO: 7
103 <211> LENGTH: 19
104 <212> TYPE: DNA
105 <213> ORGANISM: Artificial Sequence
106 <220> FEATURE:
107 <223> OTHER INFORMATION: PCR Primer
108 <400> SEQUENCE: 7
109       gaaggtgaag gtcggagtc                                             19
111 <210> SEQ ID NO: 8
112 <211> LENGTH: 20
113 <212> TYPE: DNA
114 <213> ORGANISM: Artificial Sequence
115 <220> FEATURE:
116 <223> OTHER INFORMATION: PCR Primer
117 <400> SEQUENCE: 8
118       gaagatggtg atgggatttc                                            20
120 <210> SEQ ID NO: 9
121 <211> LENGTH: 20
122 <212> TYPE: DNA
123 <213> ORGANISM: Artificial Sequence
124 <220> FEATURE:
125 <223> OTHER INFORMATION: PCR Probe
126 <400> SEQUENCE: 9
127       caagcttccc gttctcagcc                                            20
129 <210> SEQ ID NO: 10
130 <211> LENGTH: 778
131 <212> TYPE: DNA
132 <213> ORGANISM: Mus musculus
133 <220> FEATURE:
134 <221> NAME/KEY: CDS
135 <222> LOCATION: (44)...(484)
136 <400> SEQUENCE: 10
137       cggcacgaga gaaaccatac caccatccaa gagagctgac agc atg aag gtc ctc   55
138                                                       Met Lys Val Leu
139                                                        1
140       ctc ctg cta gca gcc tcg atc atg gcc ttt ggc tca ata cag gtc caa   103
141       Leu Leu Leu Ala Ala Ser Ile Met Ala Phe Gly Ser Ile Gln Val Gln
142        5                  10                  15                  20
143       ggg aac att gcg cag ttt ggg gaa atg att cgg ctt aag aca gga aag   151
144       Gly Asn Ile Ala Gln Phe Gly Glu Met Ile Arg Leu Lys Thr Gly Lys
145                         25                  30                  35
146       aga gct gag ctt agc tat gcc ttc tat gga tgc cac tgt ggc ctg ggt   199
147       Arg Ala Glu Leu Ser Tyr Ala Phe Tyr Gly Cys His Cys Gly Leu Gly
148                     40                  45                  50
149       ggc aaa gga tcc ccc aag gat gcc aca gac cgg tgc tgt gtt act cat   247
150       Gly Lys Gly Ser Pro Lys Asp Ala Thr Asp Arg Cys Cys Val Thr His
151                55                  60                  65
```

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Input Set : N:\DA\US10643038.raw
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```
152       gac tgt tgc tac aag agc ctg gag aaa agt gga tgt ggt act aag tta   295
153       Asp Cys Cys Tyr Lys Ser Leu Glu Lys Ser Gly Cys Gly Thr Lys Leu
154            70                  75                  80
155       ctg aaa tac aag tac tcc cac caa ggg ggc caa atc acc tgt tct gca   343
156       Leu Lys Tyr Lys Tyr Ser His Gln Gly Gly Gln Ile Thr Cys Ser Ala
157        85                  90                  95                  100
158       aac cag aac tcc tgt cag aaa cgg ctg tgt cag tgc gat aaa gcc gcc   391
159       Asn Gln Asn Ser Cys Gln Lys Arg Leu Cys Gln Cys Asp Lys Ala Ala
160                       105                 110                 115
161       gct gaa tgt ttc gcc cgg aac aag aaa acc tac agt tta aag tac cag   439
162       Ala Glu Cys Phe Ala Arg Asn Lys Lys Thr Tyr Ser Leu Lys Tyr Gln
163                    120                 125                 130
164       ttc tac ccc aac atg ttt tgc aaa ggg aag aag ccc aaa tgc tga       484
165       Phe Tyr Pro Asn Met Phe Cys Lys Gly Lys Lys Pro Lys Cys  *
166                 135                 140                 145
167       aaagagccat ctcctgaaac acccggacat gcgcgtctcc catcacacct ctcccagccc 544
168       caccaagttt cccggtgata aaggaaacac ccctctccca ccctagaggc aaggtggggg 604
169       cccttctttc ttcacccagg atgagacaca ggagtcttct gagtcaggct gacctttccc 664
170       caccactcca cttccttgaa tctgtctact tccacctttc tcttggcatc caacttcctt 724
171       cttcgtacct aagagagtcc tgggaggccc tcacaagtaa agcaattcat caga       778
173 <210> SEQ ID NO: 11
174 <211> LENGTH: 26
175 <212> TYPE: DNA
176 <213> ORGANISM: Artificial Sequence
177 <220> FEATURE:
178 <223> OTHER INFORMATION: PCR Primer
179 <400> SEQUENCE: 11
180       ccttgaatct gtctacttcc accttt                                      26
182 <210> SEQ ID NO: 12
183 <211> LENGTH: 19
184 <212> TYPE: DNA
185 <213> ORGANISM: Artificial Sequence
186 <220> FEATURE:
187 <223> OTHER INFORMATION: PCR Primer
188 <400> SEQUENCE: 12
189       gggcctccca ggactctct                                              19
191 <210> SEQ ID NO: 13
192 <211> LENGTH: 30
193 <212> TYPE: DNA
194 <213> ORGANISM: Artificial Sequence
195 <220> FEATURE:
196 <223> OTHER INFORMATION: PCR Probe
197 <400> SEQUENCE: 13
198       tcttggcatc caacttcctt cttcgtacct                                  30
200 <210> SEQ ID NO: 14
201 <211> LENGTH: 20
202 <212> TYPE: DNA
203 <213> ORGANISM: Artificial Sequence
204 <220> FEATURE:
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RAW SEQUENCE LISTING DATE: 03/08/2005
PATENT APPLICATION: US/10/643,038 TIME: 07:28:19

Input Set : N:\DA\US10643038.raw
Output Set: N:\CRF4\03032005\J643038.raw

<223> OTHER INFORMATION: PCR Primer
<400> SEQUENCE: 14
ggcaaattca acggcacagt 20
<210> SEQ ID NO: 15
<211> LENGTH: 20
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: PCR Primer
<400> SEQUENCE: 15
gggtctcgct cctggaagat 20
<210> SEQ ID NO: 16
<211> LENGTH: 27
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: PCR Probe
<400> SEQUENCE: 16
aaggccgaga atgggaagct tgtcatc 27
<210> SEQ ID NO: 17
<211> LENGTH: 1080
<212> TYPE: DNA
<213> ORGANISM: Homo sapiens
<220> FEATURE:
<400> SEQUENCE: 17
gcaaggggct ctaagaattg taagggaaca gatggatgtt cacaagcacc acagccctgg 60
ccacatgact ttttaggact ggtatcgcag agtgtttact taaggcggtg gaagctaaat 120
tcttagcatg tgctggagag catgaaaaag atatttactt tatgaattaa agctggagtc 180
agtgtcagcc cgaaggtgaa ggaaaaagag caacagatcc agggagcatt cacctgccct 240
gtctccaaac aggtgaggat ggggaataaa gtgaagggca gtgctttggt gggaacttca 300
aggatacgct ctggcttttt ccaggtttag aagctcatat gagacagggg tggaggaaaa 360
gaagaaagaa gaataagaag agaaagttga ggccctggcc caagttagtg ggaaggaaat 420
ccaccccatt aaactctctc cctgtggact tgggtcacac gtgaggcctg cacagtgctg 480
gaacatggta gaggcccagg acatacttcc tgtgaatgaa tgattgagcg gctgaatgaa 540
tgagtaccgc taaaagccct cttttctatt cccaaatgcc acattgagca gaagggagca 600
gagatccttg ctcagcaatt ggtagtccca tttgggtgtg caaatgagtc cacagcctgc 660
aacagcagac agtctctgcc ccccttagag gcgattgcag ggaggtggct gaccgttgat 720
cacacccaga ggctggttat gggaatttac tccatggaaa gactcggcaa aactgcctga 780
atgtgttttg gcatcaggct actgacacgt aagggtttcc caatcctcaa ctctgtcctg 840
gccaggctga tgaggggaag gaaagggatt acctaggggt atgggcgacc aatcctgagt 900
ccaccaactg accacgccca tccccagcct tgtgcctcac ctacccccaa cctccagagg 960
gagcagctat ttaaggggag caggagtgca gaacaaacaa gacggcctgg ggatacaact 1020
ctggagtcct ctgagaggta aagagccagc gaagctgatg tcctgtcaag agcagaattc 1080
<210> SEQ ID NO: 18
<211> LENGTH: 3830
<212> TYPE: DNA
<213> ORGANISM: Homo sapiens
<220> FEATURE:
<221> NAME/KEY: CDS

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 03/08/2005
PATENT APPLICATION: US/10/643,038 TIME: 07:28:20

Input Set : N:\DA\US10643038.raw
Output Set: N:\CRF4\03032005\J643038.raw

Invalid Line Length:
The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 3

VERIFICATION SUMMARY DATE: 03/08/2005
PATENT APPLICATION: **US/10/643,038** TIME: 07:28:20

Input Set : **N:\DA\US10643038.raw**
Output Set: **N:\CRF4\03032005\J643038.raw**

L:68 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:350 M:361 W: Invalid Split Codon, Sequence data for SEQ ID#: 18
L:1137 M:361 W: Invalid Split Codon, Sequence data for SEQ ID#: 97